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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,257	09/12/2000	Don Wiley Smith	22601-P002US	6780

7590 09/24/2003

Winstead Sechrest & Minick PC
5400 Renaissance Tower
1201 Elm Street
Dallas, TX 75270

EXAMINER	
GELLNER, JEFFREY L	
ART UNIT	PAPER NUMBER
3643	

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/660,257	SMITH ET AL.	
	Examiner	Art Unit	
	Jeffrey L. Gellner	3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Acknowledgement is made of Applicant's Request for Refund entered 8 July 203.

Information Disclosure Statement

Some information in the disclosure statement filed 27 June 2002 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each document listed that is not in the English language. These documents, DT 2312051 and DE 3600340A1, have been placed in the application file, but the information referred to therein has not been considered.

Affidavits pursuant to 37 CFR § 132.

The Affidavits under 37 CFR 1.132 filed 26 June 2003 (from Russell and Smith) are insufficient to overcome the rejection of claims 1-25 based upon 35 USC 103 as set forth in the last Office action because:

As to the Russell Affidavit, the allegations are that (1) the Dale reference teaches adding the fertilizer/hormone composition to transplanted trees that are 3 to 5 years old and therefore not established trees with existing roots (generally from Affidavit at Summary - para. 1); and, (2) Miller teaches applying a composition to a mature tree for a specific nutritional stress and not the general systemic stress that is the inventive concept of the instant Application (generally from Affidavit at Summary - para. 2).

Examiner considers the Russell Affidavit to be not on point. Dale is prior art that teaches the use of a fertilizer/hormone composition to the root system of a species of tree. The "age" of the tree (ie., mature or recent transplant) is not the reason for the use of Dale reference. Similarly, Miller teaches the method of applying a composition to the root system to a tree and is not used in the rejection for its specific composition. Dale teaches the specific composition.

As to the Smith Affidavit, the allegations are (1) arboreal encroachment is qualitatively and quantitatively different from nutritional distress as disclosed in the prior art references (Affidavit at para. 1c); (2) since no one has disclosed Applicant's method and composition it is novel (Affidavit at para. 1c); and (3) no one else is doing or offering Applicant's treatment which works over 90% of the time (Affidavit at para. 1e).

Examiner considers the Smith Affidavit nonpersuasive. As to allegation (1), although arboreal encroachment may be qualitatively and quantitatively different than nutritional stress, Applicant only claims a "distressed tree." A pertinent definition of distress is "a state of danger or desperate need" (Merriam-Webster's Collegiate Dictionary at page 338). Examiner considers the nutritional stress in the reference of Miller to be within the ambit of a "distressed tree."

As to allegation (2), although no single reference discloses Applicant's exact invention Examiner considers the combination of Miller and Dale to disclose Applicant's invention. The combination is proper because both references deal with root grow in distressed plant species.

As to allegation (3), Examiner considers Applicant to be alleging long felt need. One factor to be considered is that the "failure to solve long-felt need may be due to factors such as lack of interest or lack of appreciation of an invention's potential or marketability rather than want of technical know-how" (MPEP 716.04 citing *Scully Signal Co. v. Electronics Corp. of*

America, 570 F.2d 355). Examiner considers this reasoning to be the dispositive factor at work here. Examiner considers the general concept of applying root hormones to a damaged root system (where the damage is of any type) so as to attempt to restore the root system to be within the ken of one of ordinary skill in the botanical arts.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 18, 20-22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,872,899) in view of Dale (Fred Dale Special to The Star).

As to Claim 1, Miller discloses a method of treating established (defining "mature" of col. 9 line 66 as established) distressed (general teaching from "iron chlorosis" of abstract) tree species (col. 9 lines 66), the root system in soil (col. 9 lines 62-63) comprising applying a mixture to the root area (col. 9 lines 62-67). Not disclosed are the steps of creating a mixture of a fertilizer and a growth hormone. Dale discloses the step of creating a mixture of fertilizer and a root hormone (page 2 1st para.). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Miller by using with the mixture Dale so as to increase plant growth.

As to Claim 3, the limitations of Claim 1 are disclosed as described above. Not disclosed is the distressed tree a Post Oak. It would have been obvious to one of ordinary skill in the art at

the time of the invention to further modify the method of Miller as modified by Dale to use with Post Oak since this species are grown property owners.

As to Claim 4, Miller as modified by Dale further disclose a mixture of powders (see Dale).

As to Claims 5 and 7, Miller as modified by Dale further disclose a mixture of liquids ("drench" of Miller at col. 9 line 63).

As to Claim 6, the limitations of Claim 1 are disclosed as described above. Miller as modified by Dale further disclose a fertilizer with an N content of 10% and a potassium content of 10% (see Dale). Not disclosed is the P content at 25%. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using a fertilizer with a P content of 25% depending upon availability of fertilizers.

As to Claim 18, Miller discloses a method of treating a distressed (general teaching from "iron chlorosis" of abstract) tree species (col. 9 lines 66) comprising creating a hole in a root area of a tree ("banded near root zone of row crops (commercial crops, vines, trees) of Miller at col. 9 lines 64-65). Not disclosed is applying a mixture of fertilizer and root growth hormone. Dale, however, discloses the step of creating a mixture of fertilizer and a root hormone (page 2 1st para.). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Miller by using with the mixture Dale so as to increase plant growth.

As to Claim 20, the limitations of Claim 18 are disclosed as described above. Not disclosed is creating the hole with a water jet. Examiner takes official notice that it is old and

notoriously well known to make a hole with a water jet. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using a water jet so as to make the hole in an easy manner.

As to Claim 21, Miller as disclosed by Dale further discloses watering and drying (inherent in "Do not water again until the soil surface is quite dry" of Dale page 2 1st para.).

As to Claim 22, Miller discloses a kit for treating established (defining "mature" of col. 9 line 66 as established) distressed (general teaching from "iron chlorosis" of abstract) tree species (col. 9 lines 66), the root system in soil (col. 9 lines 62-63) comprising a mixture (ferrated rhodotorulic acid" of col.9 line 62); a container (inherent in "banded" of col. 9 line 64); and, a tool for applying the mixture to the root system within the soil (inherent in "banded" of col. 9 line 64). Not disclosed the mixture containing a fertilizer and a growth hormone. Dale discloses a mixture of fertilizer and a root hormone (page 2 1st para.). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the kit of Miller by using with the mixture Dale so as to increase plant growth.

As to Claim 24, the limitations of Claim 22 are disclosed as described above. Not disclosed are instructions for applying the mixture. Examiner takes official notice that it is old and notoriously well known in the agronomic art on the instructions as to how to apply fertilizer by banding (col. 9 line 64 of Miller). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the kit of Miller as modified by Dale by having instructions so as to band correctly.

As to Claim 25, Miller as modified by Dale further disclose an implement for applying the mixture (inherent in "banded" of Miller col. 9 line 64).

Claims 2, 8-17, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,872,899) in view of Dale (Fred Dale Special to The Star) in further view of Green Light Rootone.

As to Claim 2, the limitations of Claim 1 are disclosed as described above. Not disclosed is the use of NAA for the growth hormone. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

As to Claims 8 and 9, the limitations of Claim 1 are disclosed as described above. Not disclosed is the mixture further including a fungicide. Green Light Rootone, however, discloses use of Thiram in a root mixture. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using Rootone which includes Thiram as disclosed by Green Light Rootone so as to increase plant growth.

As to Claim 10, Miller discloses mixture (defined as "drench" of Col. 9 line 63) for treating adult (defining "mature" of col. 9 line 66 as established) distressed (general teaching from "iron chlorosis" of abstract) tree species (col. 9 lines 66), the root system in soil (col. 9

lines 62-67). Not disclosed is the mixture comprising a fertilizer and NAA. Dale discloses a mixture of fertilizer and a root hormone (page 2 1st para.). Green Light Rootone discloses a root growth hormone of NAA. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mixture of Miller by using the mixture Dale so as to increase plant growth and to further modify the mixture by using Rootone as disclosed by Green Light Rootone depending upon availability of growth hormones.

As to Claim 11, the mixture of Miller as modified by Dale as further modified by Green light Rootone further disclose the hormone comprising about 0.1% weight of the powder (defining "0.2%" as about 0.1% at Green Light Rootone).

As to Claim 12, the mixture of Miller as modified by Dale as further modified by Green light Rootone further disclose the hormone comprising about 0.1% weight of the liquid (defining "0.2%" as about 0.1% at Green Light Rootone) when applied as a liquid ("drench" of Miller at col. 9 line 63).

As to Claim 13, the limitations of Claim 10 are disclosed as described above. Not disclosed is a dosage of .335 milligrams per application site. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the mixture of Miller as modified by Dale and Green Light Rootone by using the specific growth hormone concentrations of .335 milligrams per application site so as to optimize the system and promote healthy root growth.

As to Claim 14, the limitations of Claim 10 are disclosed as described above. Miller as modified by Dale and Green Light Rootone further disclose a fertilizer with an N content of 10% and a potassium content of 10 % (see Dale). Not disclosed is the P content at 25%. It would

have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale and Green Light Rootone by using a fertilizer with a P content of 25% depending upon availability of fertilizers.

As to Claim 15, Miller as modified by Dale and Green Light Rootone further disclose a mixture of liquids ("drench" of Miller at col. 9 line 63).

As to Claims 16 and 17, Miller as modified by Dale and Green Light Rootone further disclose Thiram in a root mixture (see Green Light Rootone).

As to Claim 19, the limitations of Claim 18 are disclosed as described above. Not disclosed is the use of NAA for the growth hormone. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

As to Claim 23, the limitations of Claim 22 are disclosed as described above. Not disclosed is the growth hormone being NAA. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the kit of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

Response to Arguments

Applicant's arguments filed 26 June 2003 have been fully considered but they are not persuasive. The crux of Applicant's arguments rely on the Affidavits of Smith and Russell. The response to those Affidavits is given above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 703.305.0053. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 703.308.2574. The official fax telephone number for the Technology Center where this application or proceeding is assigned is 703.872.9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.

Jeffrey L. Gellner

PETER M. POON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600